

von Tröltsch applied the term "otosclerosis," meaning an atrophic form of middle-ear catarrh as distinguished from the hypertrophic form which invariably produced decided alterations of the membrana tympani. We now know that a primary atrophic form of middle-ear catarrh is not the pathology of these cases of otosclerosis, but that we have in reality to deal with a primary disease of the bony capsule of the labyrinth, and that the tuning-fork tests pointing to obstruction in the conducting mechanism are explained by the fact that this disease of the capsule quite early produces a bony fixation of the stapes in the oval window. In every case examined postmortem in which, from the appearance of the drum membrane and the tuning-fork tests the diagnosis of otosclerosis had been made, without exception, the ankylosis of the stapes as the result of disease of the labyrinthine capsule has been found.

As to prognosis, when we understand the pathology of otosclerosis there can be no question as regards improving the condition when bony fixation of the stapes has taken place. In some of the incipient cases, however, before the stapes becomes firmly fixed, a decided improvement in the hearing will occasionally result from inflation of the tube and massage of the ossicles. Such improvement is, however, only temporary, as the progress of the disease will overcome any loosening up of the stapes that may be brought about. I mention this particularly because the statement is often made that in incipient cases the diagnosis between otosclerosis and middle-ear catarrh can be made by noting the improvement from treatment in middle-ear catarrh, whereas in otosclerosis no improvement is possible. This is, however, not strictly true.

### PSYCHOTHERAPY.\*

LEWELLYS F. BARKER, M.D.

BALTIMORE.

Some physicians, like men who are told that they have used prose all their lives without knowing it, are astonished at the statement that no small part of their function as practitioners consists in the use of psychotherapeutic influences. Ever since the primitive mother began to kiss the sore finger of her crying child to make it well the human race has, partly instinctively, partly consciously, resorted to mind cure in one or another of its diverse forms to assuage its sorrows, to relieve its anxiety or to mitigate its pain. For these alleviations, sometimes priests, sometimes physicians, sometimes laymen have been agential.

There has been much disagreement as to the definition of the word "psychotherapy." Some have supposed that it is synonymous with treatment by hypnotism or suggestion; others have assumed that it is limited in its applicability to psychic diseases and still others have fallen into the error of regarding its effects as wholly psychic (in the abstract or metaphysical sense), not realizing that, in medicine, guided by the conception of psychophysiologic identity, such purely psychic influences are not conceivable. As medical men, we may be permitted, at any rate for purposes of description, to distinguish as psychical, the subjective side of brain activity, and as physical, the objective side of it, even if we admit that our total knowledge of the latter results from phenomena or psychic events, the external cause of which is obscure. Asking permission then of the metaphysically inclined to speak in these terms as thus medically defined, it may be said that we know of no way of affecting a human being psychically except through stimuli which excite his afferent nerves, or through stimuli applied directly to his brain. The

nerves carry the excitation to the central nervous system and traversing chains of neurons impinge finally on the neurons of the cerebral cortex. Certain of the excitations here set up correspond to certain sensations, feelings and ideas. Pure sensations and pure ideas, independent of physical conditions in the cerebrum physiologists assume do not exist. If this assumption be accepted then it is obvious that any influence which exerts a psychic effect also produces a physical change in the body, and we can well understand how physical and chemical influences which lead to alterations in the structure and function of the neurones of the pallium may have a profound effect on the psyche. In other words, every form of psychotherapy is also a form of physical therapy, and to avoid confusion with spiritualism or other mystical conceptions it might be better to speak of psychophysical influences and psychophysical therapy than to use the terms in vogue. Medical psychotherapy knows nothing as yet of telepathy or thought-transfer through other than recognized physical channels. In the present state of our knowledge at any rate *eine Psychotherapie ohne das Mittelglied der Empfindung ist Humbug.*

Psychotherapy has through the ages been instinctively practised but only comparatively recently has it begun to be consciously and systematically used. Suggestion is, and always has been, one of the most powerful of remedial agents.

At all times a large part—not all by any means—of the treatment of disease by drugs has in reality consisted of psychotherapy. Certain examples of this stand out conspicuously in the history of medicine. The use of theriaca had great vogue for centuries after its introduction by Andromachus of Crete. Orvietan was long believed to be a sovereign remedy against poison, the opinion being almost universally received by the learned as well as the vulgar. Red coral was strongly recommended by Rhazes in certain cases and antimony was at one time (after the cure of Louis XIV. in 1653) the most frequently prescribed of drugs. When one thinks of the enormous number of substances and preparations which have come and gone, each highly vaunted in its time for its marvelous effects, one begins to realize the larvate psychotherapy in treatment by drugs. This pharmacological psychotherapy has for the most part been instinctive, the physician believing in the virtues peculiar to the drug, and the patient believing in the physician. Sometimes psychotherapy by drugs has been consciously employed, as in the use of the placebo and in the pill of methylene blue. One thing that makes judgment so difficult regarding pharmacotherapy in any given case is the lack of means of determining satisfactorily the part which psychic influences have played in the result obtained. We must be grateful to experimental pharmacology for the help it promises to bring. It has been well said that "it is we ourselves who give to many medicaments their efficacy, and their good effects persist as long as does the faith of physicians and patients in their virtue."

The cures which from time immemorial have been attributed to magic or to supernatural means are naturally regarded by medical men as instances of success through psychotherapy also. It was the belief of the patient which did the work; shrewd Paracelsus, physician and alchemist, writing of faith-cure four hundred years ago said: "No matter whether the object of your faith is real or false, the results you get will be equally good." Read the accounts of the way the won-

\* Read in the Symposium on Therapeutics, at the Twenty-third Annual Meeting of the Association of American Physicians, Washington, May 12, 1908.

derful results were obtained by treatment in the temples of Isis in Egypt and those of Æsculapius in Greece and you will find recorded an elaborate organization of suggestive measures which rivals that of the best equipped modern sanatorium. Indeed, in the pilgrimage to the temples, the preparatory practices, the temple walks, the sacrifices with musical accompaniment, the prayers, the therapeutic conversations with the priests and, above all, the oracular dreams, we recognize a series of experiences so pregnant with psychotherapeutic possibilities that we wonder whether some healers of to-day are not too simple or too lackadaisical to make their work effective.

The doctrine of magnetism dates from Paracelsus' time; out of it grew mesmerism at the end of the eighteenth century, and it was one of Mesmer's pupils who, following the example of his master and trying to cure by the "universal fluid," accidentally threw a patient into hypnotic sleep. The history of hypnotism has been so often and so well written that I need not deal with it here. The scientific studies of Braid, Liébeault, Bernheim, Charcot and Janet (to mention chiefly foreign names) have thrown a great deal of light on hypnotic phenomena, and even those who are opposed to the use of hypnotism as a therapeutic agent can scarcely fail to be grateful for the new knowledge gained concerning the human mind through investigations into its nature. The study of hypnotism too has led to a great increase in interest in the effects of suggestion made in the waking state, both heterosuggestion and autosuggestion.

More important, perhaps, has been the revival and development of psychotherapy by persuasion rather than by suggestion; in this form of mental treatment the higher mental powers of the patient are directly appealed to, the cure being brought about largely through the re-education of the patient by rational therapeutic conversations instead of through the exercise of authority or through mere unmotivating suggestion. DuBois of Berne, Dejerine and his pupils in Paris, Oppenheim in Berlin and various clinicians in this country have been especially interested in this form of psychotherapy.

Isolation as a psychotherapeutic measure should not go unmentioned. It is the great merit of Dr. Weir Mitchell that he saw the protective benefits of isolation and realized its aid in instituting any regular physical and psychical régime in the treatment of the severer forms of the psychoneuroses; he made it an important element in his so-called rest-cure and others who employ it in selected cases are loud in its praise.

A striking fact about several forms of psychotherapy is their origin, at least in germ, outside of the ranks of the medical profession. Isolation, for example, arose in antiquity as a self-inflicted discipline in the practices of the anchorites, hermits and monks, who withdrew themselves from society into deserts or solitary places, sometimes as a penance, but more often to avoid the temptations of the world, to devote themselves to contemplation and religious exercises, and to attain to a peace and calm otherwise denied them. To many men and women there come times in life when separation from the world seems to be a necessity; they feel that they must get away from people, from the duties of society, from an unsatisfactory environment. The "retreat" of the Catholic church meets this need for some. The summer vacation in the wilderness satisfies it for others.

Psychotherapy by suggestion was largely extramedical in source. It began in the form of secret remedies of

quacks, in the performance of miracles, in the use of charms, philters, talismans, amulets, phylacteries and mezuzahs, and in the application of magnets and metals. The laity have been fertile in the devising of impressive suggestive measures from the earliest times down to the era of Perkins tractors, proprietary medicines and electric belts.

Even persuasion, the last psychotherapeutic method to be thoroughly employed consciously by physicians, dates back to the stoic philosophers with Seneca as a type, and to the confessors and moral directors of the church. These men worked out excellent methods for helping the aboulie and the victims of morbid scruples to overcome their inertias, their doubts and their fears.

In the United States, the development of psychotherapy outside the medical profession has been perhaps as notable as inside it. Nowhere, unless in Germany, have "patent" and proprietary medicines been more in vogue. In the wide-spread mind-cure movement here we see a development of great importance, designated by one of our leading psychologists as the only decidedly original contribution of the American people to the systematic philosophy of life. The "new thought" advocates and the christian science healers combine suggestion in the waking state with more or less persuasion; in the "Emmanuel church movement" (which through medical aid separates so-called organic from so-called functional cases) the clergymen who treat the functional disorders use suggestion in the waking state, persuasion, and also, to some extent certainly, suggestion in hypnosis.

Despite the fact that psychotherapy has been so prominently extramural in source and prevalence it is to be said for medical men that when convinced of its efficacy and legitimacy they have been willing to adopt it. Further, for the foundation of the theory of the subject and for nearly all actual scientific knowledge regarding it the world has to thank the investigations of members of our profession. Any neglect, recalcitrance or protestation on the part of physicians in the matter have been due, in my opinion, partly to a desire to avoid even the appearance of evil and humbug, partly to the exercise of so much zeal in those physical, chemical and biologic studies which are flooding our science with new light that less time and attention have been devoted to psychologic and psychiatric studies than they deserve.

While the main field of application of psychotherapy is in the treatment of the psychoneuroses, it has also functions in combating the psychoses on the one hand and the whole group of somatic diseases on the other. All symptoms which can be influenced by the nervous system are more or less accessible to psychotherapy. Moreover, in the carrying out of any physical methods of treatment the patient must be led to have belief in their efficacy and he must be brought to a willingness to do what is recommended. The establishment of medical obedience, as well as the awakening of confidence, which precedes it, are essentially psychotherapeutic procedures.

Attempts have been made to classify psychotherapeutic methods into: (1) those which act chiefly by virtue of the particular feeling-tones (in the pleasure-pain series) which accompany the sensations called forth by the method used; and (2) those which act through the intellectual processes excited by the measures employed. The former are naturally more successful in affective disturbances, the latter in intellectual. But the mind is after all a unity and we nearly always have to deal

with both classes of disturbances in the same individual and therefore require to use both sets of methods.

In treating abnormal affective states we may try to get rid of the painful sensations and ideas (negative feeling-tone) by the substitution of pleasurable sensations and ideas (positive feeling-tone). Amusement, diversion, exercises are resorted to for this purpose. We encourage the patient to go to the play or the opera, to play golf or bridge or "what-am-I," to enter more fully into social life; or we recommend a trip to Atlantic City or to Hot Springs or to Europe. We help the handicapped to find suitable remunerative occupation and we try to transplant the misunderstood into a more sympathetic environment. The methods of treatment in which rewards and penalties are used also come in here; they may be employed with patients of all ages but require infinite tact on the part of the physician; individualization must always be kept carefully in mind.

In treating patients through the intellect we use either suggestion or persuasion. Very different definitions are given to these two terms by different writers. In suggestion, we make no effort to use ideas which will explain to the patient why his interpretations of his symptoms are wrong, but we tell him they are wrong and rely on the authority we have over him to make the suggestive idea effective. Or in some other way we make the mind of the patient (without his control) accept some good idea. When using persuasion we lead the patient by means of his reason (with his control) to accept an idea and so to arrive at a new opinion. We speak of heterosuggestion or heteropersuasion in these cases, but we should similarly discriminate between autosuggestion and autopersuasion. In autosuggestion one fixes in his own mind an idea the truth or falsity of which he has not carefully examined and criticized; when on the other hand the idea is not accepted until carefully verified the instance is one of autopersuasion or self-instruction.

Heterosuggestion may be given in the waking state or in hypnosis. In order that suggestion may be successful, faith in authority must in some way be aroused. Quacks excite this authority idea by non-ethical, illegitimate methods. Marvelous therapeutic results are advertised and testimonials of the cured are distributed. Priests help to arouse it by moral and religious appeal, sometimes ascribing the cure to supernatural agencies. The pilgrimages, prayers, relics and heaps of crutches help to enliven faith. "New thoughters" advertise the successes resulting from the acceptance of what they regard as an important philosophic system, involving among other things a belief in the saving grace of optimistic moods and healthy-minded attitudes. Christian science does it by combining the ideas of religion and philosophy into a system, denying the existence of disease, and advertising widely the cures of those whose symptoms have disappeared as soon as they have fully accepted the doctrine.

Physicians awaken confidence and inspire the idea of authority by their scientific training, and by their mode of inquiry and of examining the patient. The young man without reputation can arouse faith if he have a suitable personality and be well trained in the methods of taking the anamnesis and of making the physical examination. Blood counts, bacteriologic cultures, determination of opsonic indices, tuberculin tests, sphygmographic tracings, x-ray photographs and the whole paraphernalia of clinical diagnosis not only give real information to the physician but they also excite belief.

After the thorough examination, a definite diagnosis, briefly stated to the patient, prepares him to hear what the treatment is to be and leads him to submit to it hopefully.

Suggestion in the waking state may be larvate or direct. In treating functional nervous disorders many physicians resort to larvate suggestion. They recommend massage, or a diet, electricity or a drug or a combination of several measures and tell the patient that he will get well. They see the patient again from time to time and assure him that he is incontestably better, and try gradually to establish in him the conviction that he is being cured and, finally, that he is cured. The conscientious physician (when using larvate suggestion) does not, as a rule, prescribe measures which can not of themselves do any good whatever, but always tries to use means which will, through their physical effect on the body, aid at least to some slight extent the psychotherapy in restoring health. The more faith he has himself in the bearer of the larvate suggestion the more, other things equal, he is likely to excite in his patient.

The advantage of hypnotic suggestion lies in the greater susceptibility of the patient to heterosuggestion in this sleeping state. Every *hypnotiseur* develops his own technic of producing hypnosis though all the methods have in common the suggestion of sleep. The patient's belief is aroused before hypnosis is undertaken and the sleep is suggested, usually by the aid of certain physical methods (fixation of sight on a bright object; strokes or passes; pressure on the eyes, etc.). No rigid routine is satisfactory; any method must be adapted to the individual case, and the most skilful hypnotizers are resourceful in little tricks which aid in strengthening the suggestion and in inducing sleep. Therapeutic suggestions, repeated several times, are usually given in the more superficial stages of hypnosis (somnolence and hypotaxia) rather than in the more dangerous deeper stages (somnambulistic sleep with hallucinations and amnesia). The dangers of hypnosis have been exaggerated by some and under-estimated by others. We know now pretty well what they are and methods for avoiding them have been and are being worked out. In this connection the process of de-suggestion as advocated by Bernheim seems to be very important. Certainly no one except a medical man or a trained psychologist should use hypnosis; needless to say, a third person should always be present.

In psychotherapy by persuasion the physician has opportunity for the exercise of the highest powers of his own mind and he makes his appeal to the best qualities of the minds of his patients. The principles are those of education in general; indeed psychotherapy by persuasion might well be designated medical pedagogy. It involves training of the voluntary attention, schooling of the emotions and rational education of the will. It is the most rewarding of the psychotherapeutic methods and seems destined to occupy a large part of the energy of medical practitioners. By its aid the physician is able to rid a patient's mind of harmful ideas and associations, refuting them, or, by ignoring them, leading the patient to forget them. With its help too he creates new ideas and associations in the mind, supplementing perhaps a limited or faulty early education and environment; through occupation-therapy of various sorts he may teach the patient to find health and satisfaction in work. And here the medical psychotherapist joins hands with the great army of educators—the teachers, the clergymen and the social service workers of his time.

The diseases chiefly amenable to psychotherapy, namely the psychoneuroses, are most troublesome to treat when their management is not understood, but many a mind with its door apparently permanently closed to healthy influences will speedily open to him who knows how to find the key to its lock. No physician has the key to all the doors he is asked to open; I know of no psychotherapist who has all successes and no failures; but any intelligent medical locksmith may learn how to gain entrance to many abnormal minds if he interest himself in the problem. It is saddening and discouraging to meet with some of the somatic derelicts we see in our offices and in the hospital wards (victims of large white kidney, thoracic aneurism, non-compensable myocardial insufficiency, dementia paralytica or carcinoma ventriculi) for in these cases we realize how little as yet we are able to offer them in the way of help. It is gratifying by contrast to see certain of the psychoneurotics who have been, perhaps, miserable invalids for years, burdens to themselves and to their friends, reclaimed by suitable means, made well again and equal to normal life. The limitations of psychotherapy are definite; they are given by the capacity of the individual brain for education and by various physical and social factors. It is matter for satisfaction that its field of application is as broad as workers on the subject are finding it to be. It remains for the future to reveal to us all the opportunities of which we may take advantage in extending and improving the activities of that great organ of adaptation in our bodies—the cerebrum. Here lies a fruitful territory for clinical research.

Psychotherapy has had such a "yellow streak" in it that many medical men have refrained from utilizing to the full the good in it. This is one reason why it is desirable that conservative, scientifically trained men should work with it and let us know their experience concerning its advantages on the one hand and its limitations and dangers on the other. Its use should be preceded in every case by the making of an accurate diagnosis by our best methods. It is no cure-all, but in certain cases it is indispensable, and with all patients it is a valuable supplement to other forms of therapy.

6 Franklin Street, East.

## ANEURISM OF THE HEART.

WITH REPORT OF A CASE ASSOCIATED WITH MEDIASTINO-PERICARDITIS.\*

J. B. M'ELROY, M.D.

MEMPHIS, TENN.

Little space is given to the consideration of this subject in text-books on the principles and practice of medicine, or even in those on diseases of the heart. By the earlier medical writers the term "cardiac aneurism" was used to signify enlargement of the heart. Thus Auenbrugger and Corvisart used the terms "aneurysima activa," signifying enlargement from hypertrophy, and "aneurysima passiva," signifying enlargement with dilatation. Several years later John Hunter and his nephew Matthew Baillie, gave to the term its modern significance, viz., a partial dilatation of the cardiac wall; hence aneurism of the heart was often spoken of as partial aneurism.

In the general literature to-day three different condi-

tions are spoken of under the term aneurism of the heart, namely:

1. Aneurismal dilatation of the coronary arteries, which may vary in size from a mustard-seed to a cherry, may be multiple or single, and is due to sclerosis or embolism of these vessels.

2. Aneurism of the valves of the heart, by which is meant a cavity in the substance of the valve, containing pus or other inflammatory products, clotted blood or debris. These arise from small areas of endocarditis, either on the surface or in the substance of the valve, and according to Drasche, who does not agree with some other authors, is more frequent in the mitral valve.

3. Aneurism of the cardiac wall.

The first two conditions are almost wholly of pathologic interest, but their inclusion under the term "aneurism of the heart" has somewhat confused the statistics on the subject.

It is to the third condition, or aneurism of the cardiac wall, that I shall refer in this paper. This is not of very frequent occurrence, as will be seen from the statement of Philip D. Bourland, who was able to find but two cases reported by American authors during thirteen years prior to 1904. In 1867 Pelvet collected reports of eighty-seven cases from the world's literature up to that time. In 1883 Legg made cardiac aneurism the subject of his Bradshaw lectures, in which he collected reports of ninety cases, probably including those of Pelvet. According to Warthin, more frequent reports of the condition have been made since that time, and there are now in the literature reports of possibly three hundred cases.

### REPORT OF CASE.

*Patient.*—D. R., white, male, aged 49, was admitted to St. Joseph's Hospital, Dec. 24, 1907, to the service of Dr. W. T. Braun, to whose courtesy I am indebted for the privilege of observing the case. The patient complained of shortness of breath and dropsy.

*Personal History.*—Family history was negative. The patient had frequent attacks of malaria in Arkansas; also had grip, pneumonia and gonorrhea. He was kicked by a mule several years ago, losing the sight of his right eye. He had never had rheumatism and denied syphilis; had used alcoholic drinks moderately and had worked hard. About two years prior to this admission, he came to St. Joseph's Hospital complaining of shortness of breath and dropsy. According to the patient, after a prolonged stay, he returned home apparently well, and had no further trouble until a short time before his last admission.

*Present Illness.*—He had some pain in the chest, the location of which he was unable to define. It had not been severe, had not radiated to the side of the neck nor to the arm, and had not been associated with the fear of death. He had difficulty in getting his breath, especially on exertion, and at times the dyspnea had been so great as to require him to sleep sitting up. He had lately had some edema of the feet and ankles and had suffered with swelling and fulness of the abdomen.

*Physical Examination.*—The patient was a fairly well-nourished man. The skin was subicteric, the mucous membranes pale; there was a cataract in the right eye, slight edema of the feet and legs; no glandular enlargements.

*Chest:* There was dyspnea and slight impairment of respiratory expansion at the left base. There was a pulsating tumor in the chest wall, in the apex region. This pulsation seemed to be expansile and to correspond to the apex impulse. There was no systolic retraction in this area nor in the left back. There was some pulsation of the carotids, though not marked. The jugulars were not distended on deep inspiration and there was no diastolic collapse of these vessels. The peripheral veins were abnormally full. The abdomen was distended, but there was no distention of the abdominal veins.

\* Read in the Section on Practice of Medicine of the American Medical Association, at the Fifty-ninth Annual Session, held at Chicago, June, 1908.